Art Unit: 2617

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/9/09 has been entered.

Response to Arguments

- 2. Applicant's arguments filed 9/9/09 have been fully considered but they are not persuasive.
- 3. Applicant argues that the Applicants respectfully contend that the need for <u>THREE</u> references to reject claims 1, 2, 10-12, 19-21, 23, 24, 26, 27, 29 and 30 is an indication of the NON-obviousness of the claimed features.
- 4. In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991). The criterion is not the number of references, but what they would have meant to a person of ordinary skill in the field of the invention.
- 5. Applicant argues that neither Whitington, Lohtia and Degraeve, either alone or in combination, disclose, teach or suggest such a <u>location based</u> message that is both associated with a <u>current location</u> of a subscriber device AND selected using at least one auxiliary digit suffixed to an end of a telephone number, as claimed. Furthermore, Degraeve, and the

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Examiner's other cited references, <u>considered as a whole</u> fail to disclose, teach or suggest a location based message that is both associated with a <u>current location</u> of a subscriber device AND selected using at least one auxiliary digit suffixed to an end of a telephone number, as recited by claims 1-4, 7-14 and 17-31.

However, The Examiner respectfully disagrees. Lohtia teaches a method and system for

providing information to a communication device in response to a request for such service received from the communication device (e.g., see at least the abstract). Lohtia addresses the Applicants claim limitation as follows receiving an information telephone call from a subscriber device (11 of figure 1) at a mobile switching center (12 of figure 1)(Col. 4 line 66-Col. 5 line 5 indicates that the user triggers the on demand SMS information service by dialing the appropriate predetermined telephone number on the handset...these dialed digits are sent to MSC 12), a telephone number initiating said telephone call (e.g., at least col. 1 lines 48 - 51 indicates that the trigger may be a dialed telephone number, feature code, other dialed digits, or SMS origination messages)querying a location based service to obtain a location of said subscriber in response to said telephone call (e.g., Col. 2 line 40 -50 indicates that user can select services such as location information...the request is made by dialing the service request feature code, telephone number, or by invoking an SMS origination request, see also Col. 4 Line 32, and Col. 5 line 30)(note: one of ordinary skill in the art would also note that the HLR further stores the current location of the subscriber against the IMSI- Lohtia explicitly teaches the HLR 305 in figure 3.); retrieving a location based message associated with obtained current location and selected using said service request feature code, telephone number, or by invoking

an SMS origination request, and transmitting said retrieved location based to said subscriber(col. 4 lines 48-50 teaches that the requested information may be provided over SMS whenever requested by the user) (see also Col. 3 Lines 35-42, Col. 5 lines 56-59, and Col. 5 Line 66-Col.6 line 5).

The missing elements of Lohtia et al. include the location-based service to obtain a current location of the subscriber device and a telephone number initiating said telephone call including at least one auxiliary digit (feature code) suffixed to an end of said telephone number before transmission of said telephone number; retrieving said location based message associated with said obtained current location and selected using said at least one auxiliary digit suffixed to said end of said telephone number; and transmitting said retrieved location based message to said subscriber device.

However, Whittington illustrates the location-based service to obtain a current location of the subscriber device (e.g., at least the abstract and col. 2 lines 2-5 indicates a method of providing services to a wireless telephone subscriber based upon the geographic location of the wireless telephone unit...in response to receiving the feature code, the method sends a query to a location finding service for the current location of the wireless telephone unit) and a telephone number initiating said telephone call including at least one auxiliary digit (feature code) prefixed to said telephone number before transmission of said telephone number(e.g., the feature code and the telephone number are received by the MSC as an incoming call as noted in at least col. 3 lines 36-37); retrieving said location based message associated with said obtained current location and selected using said at least one auxiliary digit prefixed to said telephone number(i.e., the method may be used for providing location based services

to wireless subscribers based upon there current location. Examples of such location based services would be the retrieving of the provisioned information from restaurants, hotels, or automobile repair or service facilities based on the subscriber's current location as outlined in at least col. 4 lines 53-65); and transmitting said retrieved location based message to said subscriber device(e.g., see retrieval noted in col. 4 lines 60-65).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Lohtia et al. to include a feature code appended to a telephone number as taught by Whitington for the purpose of providing a services as taught by Whitington. Both references include a desire for a user to retrieve information services based on a request. Lohtia suggest the trigger may be a dialed telephone number, feature code, other dialed digits, or SMS origination messages. Whitington teaches that the digits are added to the telephone and in the specification examples are shown where the digits are added as prefix digits. Therefore, one of ordinary skill in the art would have been motivated to combine the teachings.

The missing elements of Lohtia and Whiting include where the requested information retrieval is obtained based on digits suffixed to the telephone number.

Degrave, as illustrated below teaches digits are suffixed by said subscriber to the end of said telephone before transmission of said telephone number, retrieving information related to based on requested information associated with said at least one auxiliary digit suffixed to said end of telephone number before transmission of said telephone number(e.g., see at least paragraphs 0038-0040,0049,0062 and 0079).

Therefore it would have been obvious to person of ordinary skill in the art at the time the invention was made to modify Lohtia as modified by Whitington to include wherein the digit is

Art Unit: 2617

suffixed to the telephone number by said subscriber before transmission of said telephone number for the purpose of retrieving data from a database using any kind of mobile phone as taught by Degrave in paragraph 0010. A person of ordinary skill in the art with a desire to retrieve information based on a request from a mobile telephone would have been motivated to combine the teachings of Lohtia, Degrave and Whitington to arrive at the Applicants claimed invention since the combination of all three references teaches how one would perform such functions to retrieve the desired information.

- 7. Applicant argues Lohtia fails to teach or suggest a location based message that is both associated with a current location of a subscriber device AND selected using at least one auxiliary digit suffixed to an end of a telephone number, as recited by claims 1-4, 7-14 and 17-31.
- 8. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The rejection is based on the combination as noted above.
- 9. Applicant's arguments with respect to claims 6 and 16 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 2. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1,2,10,11,12,19,20,21,23,24, 26,27,29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lohtia (US 6,560,456) in view of Whitington U.S. Patent No.: 6,131,028 and further in view of Degraeve US Patent Pub. No. 20010049274

Regarding claims, 1,11,20,23,26,and 29, Lohtia et al. teaches a method and system of

providing location-based reference information in a wireless network comprising: receiving an information telephone call from a subscriber device (11 of figure 1) at a mobile switching center (12 of figure 1)(Col. 4 line 66-Col. 5 line 5 indicates that the user triggers the on demand

SMS information service by dialing the appropriate predetermined telephone number on the handset...these dialed digits are sent to MSC 12), a telephone number initiating said telephone call (e.g., at least col. 1 lines 48 - 51 indicates that the trigger may be a dialed telephone number, feature code, other dialed digits, or SMS origination messages)querying a location based service to obtain a location of said subscriber in response to said telephone call (e.g., Col. 2 line 40 -50 indicates that user can select services such as location information...the request is made by dialing the service request feature code, telephone number, or by invoking an SMS origination request, see also Col. 4 Line 32, and Col. 5 line 30)(note: one of ordinary skill in the art would also note that the HLR further stores the current location of the subscriber against the IMSI- Lohtia explicitly teaches the HLR 305 in figure 3.); retrieving a location based message associated with obtained current location and selected using said service request feature code, telephone number, or by invoking an SMS origination request, and transmitting said retrieved location based to said subscriber(col. 4 lines 48-50 teaches that the requested information may be provided over SMS whenever requested by the user) (see also Col. 3 Lines 35-42, Col. 5 lines 56-59, and Col. 5 Line 66-**Col.6** line 5).

The missing elements of Lohtia et al. include the location-based service to obtain a current location of the subscriber device and a telephone number initiating said telephone call including at least one auxiliary digit (feature code) suffixed to an end of said telephone number before transmission of said telephone number; retrieving said location based message associated with said obtained current location and selected using said at least one auxiliary digit suffixed to

said end of said telephone number; and transmitting said retrieved location based message to said subscriber device.

However, Whittington illustrates the location-based service to obtain a current location of the subscriber device (e.g., at least the abstract and col. 2 lines 2-5 indicates a method of providing services to a wireless telephone subscriber based upon the geographic location of the wireless telephone unit...in response to receiving the feature code, the method sends a query to a location finding service for the current location of the wireless telephone unit) and a telephone number initiating said telephone call including at least one auxiliary digit (feature code) prefixed to said telephone number before transmission of said telephone number(e.g., the feature code and the telephone number are received by the MSC as an incoming call as noted in at least col. 3 lines 36-37); retrieving said location based message associated with said obtained current location and selected using said at least one auxiliary digit prefixed to said telephone number (i.e., the method may be used for providing location based services to wireless subscribers based upon there current location. Examples of such location based services would be the retrieving of the provisioned information from restaurants, hotels, or automobile repair or service facilities based on the subscriber's current location as outlined in at least col. 4 lines 53-65); and transmitting said retrieved location based message to said subscriber device(e.g., see retrieval noted in col. 4 lines 60-65).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Lohtia et al. to include a feature code appended to a telephone number as taught by Whitington for the purpose of providing a services as taught by Whitington. Both references include a desire for a user to retrieve information services based on a request.

Lohtia suggest the trigger may be a dialed telephone number, feature code, <u>other dialed digits</u>, or SMS origination messages. Whitington teaches that the digits are added to the telephone and in the specification examples are shown where the digits are added as prefix digits. Therefore, one of ordinary skill in the art would have been motivated to combine the teachings.

The missing elements of Lohtia and Whiting include where the requested information retrieval is obtained based on digits suffixed to the telephone number.

Degrave, as illustrated below teaches digits are suffixed by said subscriber to the end of said telephone before transmission of said telephone number, retrieving information related to based on requested information associated with said at least one auxiliary digit suffixed to said end of telephone number before transmission of said telephone number(e.g., see at least paragraphs 0038-0040,0049,0062 and 0079).

Therefore it would have been obvious to person of ordinary skill in the art at the time the invention was made to modify Lohtia as modified by Whitington to include wherein the digit is suffixed to the telephone number by said subscriber before transmission of said telephone number for the purpose of retrieving data from a database using any kind of mobile phone as taught by Degrave in paragraph 0010. A person of ordinary skill in the art with a desire to retrieve information based on a request from a mobile telephone would have been motivated to combine the teachings of Lohtia, Degrave and Whitington to arrive at the Applicants claimed invention since the combination of all three references teaches how one would perform such functions to retrieve the desired information.

Art Unit: 2617

Regarding claims 2, 12, 21, 24, 27 and 30 and as applied to claims 1,11,20,23,26, and 29, Lohtia et al. clearly teach the claimed invention except the method and system wherein at least two auxiliary digits are included with said information telephone call.

In the same field of endeavor, Whitington clearly show and disclose the method and system wherein at least two auxiliary digits are included with said information telephone call (column 3 lines 22-35 and column 4 lines 53-65).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Lohtia et al. to include at least two auxiliary digits with said information telephone call as taught by Whitington for the purpose of providing a location based services.

Nevertheless, Whitington does not explicitly teach that the digits are suffixed by said subscriber to the end of said telephone before transmission of said telephone number. In the same token one of ordinary skill in the art would note that Whitington does not explicitly teach that the digits **cannot** be suffixed by said subscriber to the end of said telephone.

However, Degrave teaches digits are suffixed by said subscriber to the end of said telephone before transmission of said telephone number, retrieving information related to based on requested information associated with said at least one auxiliary digit suffixed to said end of telephone number before transmission of said telephone number(e.g., see at least paragraphs 0038-0040,0049,0062 and 0079).

Therefore it would have been obvious to person of ordinary skill in the art at the time the invention was made to modify Lohtia as modified by Whitington to include wherein the digit is suffixed to the telephone number by said subscriber before transmission of said telephone

number for the purpose of at least transferring data from a database using any kind of mobile phone as taught by Degraeve in paragraph 0010.

Regarding claims 10 and 19 and as applied to claims 1 and 11, Lohtia et al. disclose the claimed invention except a method of providing location-based reference information in a wireless network according to claim 11, wherein: said current location of said subscriber is determined using a known location of a cell/sector servicing said subscriber.

In the same field of endeavor, Whitington as modified by Degraeve clearly show and disclose except a method of providing location-based reference information in a wireless network according to claim 11, wherein: said location of said subscriber is determined using a known location of a cell/sector servicing said subscriber (**column 4 line 60-65**).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Lohtia et al. to include said location of said subscriber is determined using a known location of a cell/sector servicing said subscriber as taught by Whitington as modified by Degraeve for the purpose of establishing a point of reference in terms of location services.

Claims 3,4,7, 8,9,13,14,17,18,22,25,28,31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lohtia et al. (US 6,560,456) in view of Whitington U.S. Patent No.: 6,131,028 in view of Degraeve US Patent Pub. No. 20010049274 and further in view of Bar et al. (US 6,456,852).

Regarding Claims 3, 13, 22, 25, 28 and 31 and as applied to claims 1, 11, 20, 23, 26 and 29, Lohtia et al. as modified by Whitington clearly teach claimed invention. Lohtia further

teaches that an information number can be any number which would obviously include the dialed digits "4-1-1" (Col. 5 lines 42-44).

Although, the dialed digits "4-1-1" is a well known telephone number for information calls, Lohtia et al. as modified by Whitington as modified by Degraeve does not specifically state that an information number uses the dialed digits "4-1-1".

In the same field of endeavor, Bar et al. teaches the information number being the dialed digits "4-1-1" (Col. 3 Line 15).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Lohtia et al. as modified by Whitington as modified by Degraeve to include the dialed digits "4-1-1" as the information number utilized for location finding services as taught by Bar et al. By using the dialed digits "4-1-1" it is obvious that dialing for information could be further automated.

Regarding claims 4, 8, 9,14,17 and 18 and as applied to claims 1 and 11, Lohtia et al. as modified by Whitington as modified by Degraeve clearly disclose the claimed invention except teaching that the subscriber can be located using wireless or cellular signaling, time difference of arrival, and time of arrival.

However, in the same field of endeavor, Bar et al. teach that the subscriber can be located using wireless or cellular signaling (Col. 5 lines 37–49), time difference of arrival (Col. 3 line 47), and time of arrival (Col. 3 line 46).

Therefore it would have been obvious to a person at the time the invention was made to modify Lohtia et al. as modified by Whitington as modified by Degraeve to include

or cellular signaling, time difference of arrival, and time of arrival as taught by Bar et al. for the purpose of location services.

Regarding claim 7 and as applied to claim 1 above, Lohtia et al. as modified by Whitington as modified by Degraeve clearly disclose the claimed invention except teaching that the location is determined by using a network generated Location based on a centroid of a cell site sector's radio frequency polygon.

However, in the same field of endeavor, Bar et al. teaches that location determined by using a network generated Location based on a centroid of a cell site sector's radio frequency polygon (Col. 3 Lines 25-35).

Therefore it would have been obvious to a person at the time the invention was made to modify Lohtia et al. as modified by Whitington as modified by Degraeve to include a location determined by using a network generated Location based on a centroid of a cell site sector's radio frequency polygon as taught by Bar et al. for the purpose of location services.

Claims 6 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lohtia et al. (US 6,560,456) in view of Whitington U.S. Patent No.: 6,131,028 in view of **Degraeve US**Patent Pub. No. 2001004927 and further in view of Tell et al. (US Patent No.: 5,774, 802).

Regarding claims 6 and 16 and as applied to claims 1 and 11 above, the Lohtia and Whitington as modified by Degraeve combination teaches all the particulars of the claims except locating the subscriber using angle of arrival.

However, Tell teaches locating a wireless device using angle of arrival (col. 5 lines 50-55).

Art Unit: 2617

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Tell into that of the combination for the obvious reason of having another way to locate the subscriber.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES SHEDRICK whose telephone number is (571)272-8621. The examiner can normally be reached on Monday thru Friday 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles Shedrick/ Examiner, Art Unit 2617